

REMARKS

Claim 1 is amended to include the substance of Claims 16 and 17, and Claim 20 is amended to include the substance of Claims 21 and 22. Claims 16-19 and 21-23 are cancelled without prejudice. Claims 1-15 and 20 remain, with no claim previously allowed.

Claim 1 stands rejected as unpatentable over *Brotman* (5,917,890) in view of *Meador* (5,638,425). Because Claim 1 now includes the elements previously in Claims 16 and 17, the applicant respectfully traverses that rejection as previously directed to those dependent claims.

Amended Claim 1 recites an embodiment of improving alphabetic speech recognition comprising (in combination with the other recited elements) recognizing a first spoken alphabetic character input from a user, and querying the user to verify that the recognized character input is the same as a first spoken alphabetic character input received from the user. If the recognized input is not the same as the first spoken input, the method receives from the user a DTMF input for each of the first spoken alphabetic characters received from the user. If one character string associated with the DTMF tones matches the first spoken character input, the character string associated with that DTMF input is designated as correct.

However, before designating the character string associated with the DTMF input as a correct character string from the user, the method determines whether an alphabetic character string associated with the DTMF input sounds like the first spoken character string from the user. Namely, the method queries the user to determine whether the character string associated with the DTMF input matches the first spoken input from the user. If more than one character string associated with the DTMF input sounds like the first spoken input from the user, the method receives a second spoken input of the alphabetic character input from the user. The method compares that second spoken input from the user to each of the more than one character strings determined to be associated with the DTMF input received from the user that sound like the user's first spoken input. That is, the user is asked to repeat that user's first spoken input, a difference over *Brotman*. If the second spoken input from the user matches one of the more than one character strings previously determined to be associated with the user's

DTMF input, the method designates the character string associated with the DTMF input that matches the second spoken input from the user, as a correct alphabetic character.

The rejection, as to Claims 16 and 17, states that *Brotman* discloses if more than one character string is determined to be associated with the DTMF key tones from the user that sound like the first spoken alphabetic character input from the user, a second spoken input of the alphabetic character input is received from the user. Column 4, Lines 14-15 and Column 5, Line 17 of *Brotman* are cited in support. However, a close reading of *Brotman*, especially those cited passages, does not support that interpretation of *Brotman* nor the rejection based thereon.

According to *Brotman*, if no match is found for the first character uttered by the user, then the system asks for (preferably) a DTMF input to aid in identifying that character (Column 4, Lines 50-57). Alternatively, if the character selected by the *Brotman* system does not match the uttered character, then the system prompts the user to speak a predetermined standard word beginning with the uttered character (Column 5, Lines 8-19).

Brotman uses that input, whether DTMF or standard spoken word, to select a subset of the stored signals representing the spoken alphabetic characters (Column 5, Lines 20-22). *Brotman* then selects from that subset a best matching character, and asks the user whether each candidate alphabetic character is the uttered character (Column 5, Lines 34-38). If the candidate character selected by the system matches the uttered character, the system has correctly captured an alphabetic character and asks the user for the next character (Column 5, Lines 40-45).

However, if no candidate characters in the subset match the uttered character, then *Brotman* prompts the user to re-utter the character, and returns to the initial starting point ("step 120") to re-try capturing the character (Column 5, Lines 54-58). In other words, at that point *Brotman* performs a do-over *without asking the user to repeat the previously-uttered alphabetic character input*, and *without determining whether the second character input uttered by the user matches one of the more than one character strings associated with the DTMF input received from the user*. At least in those aspects, accordingly, *Brotman* fails to teach or suggest the speech recognition method embodied in amended Claim 1.

Meador does not supply the applicants' teachings missing from *Brotman* and was not cited for that purpose. Accordingly, Claims 1 et al define patentable subject matter over *Brotman* in view of *Meador*.

Claims 2-14 and 18-19 are rejected as being unpatentable over *Brotman* in view of *Meador*, further in view of *Hartley* (6,910,012). Because Claims 2-14 depend from amended Claim 1, those claims are likewise patentable over the applied art for the reasons set forth above with respect to their parent claim.

Claims 18 and 19 are cancelled without prejudice, and so the rejection of those claims is moot.

Claims 20-22 are rejected as unpatentable over *Brotman* in view of *Meador*, and further in view of *Hartley*. Claim 20 is currently amended to include the elements formerly in dependent Claims 21 and 22, containing system elements analogous to the method elements currently added to amended Claim 1. Accordingly, amended Claim 20 recites a system embodiment that is analogous to amended Claim 1, comprising a speech recognition engine operative to receive a second spoken input of the alphabetic character input from the user if more than one character string of that input is associated with DTMF input from the user. The speech recognition engine of Claim 20 compares that second character input from the user to each of the plural character strings associated with the DTMF input from the user, and designates the DTMF-associated character string that matches the second spoken character input if that second spoken character input from the user matches one or more of the character strings associated with the DTMF input.

Brotman fails to disclose or suggest a speech recognition engine operative as required in the embodiment of amended Claim 21. Accordingly, Claim 21 is patentable over *Brotman* in view of *Meador* and *Hartley*.

The foregoing is submitted as a complete response to the Office Action identified above. The applicant respectfully submits that the present application is in condition for allowance and solicits a notice to that effect.

Respectfully submitted,

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